THE RESULTS OF THE 1989 "GUIDE TO EATING ONTARIO SPORT FISH" QUESTIONNAIRE

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Report Prepared by:
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SUMMARY

This report addresses the results of a questionnaire associated with the 1989 "Guide to Eating Ontario Sport Fish", with comparisons to some of the results in the 1986 questionnaire. A total of 913 responses to the 1989 questionnaire were received and used in the analysis found in this report.

Highlights of the results are as follows:

1. Over 70% of the respondents in the 1989 survey had used the Guide in previous years.

2. Over 75% of the respondents indicated that their fishing and/or fish-consuming habits had changed after using the Guide.

3. Over 87% of the respondents found that the information in the Guide met their needs.

4. Over 75% of the respondents check the Guide guidelines before consuming their catch, and 85% follow the guidelines if there are consumption restrictions indicated for their catch.

5. Almost 90% of the respondents found the revised front text in the 1989 Guide useful and informative.

6. Over 60% of the respondents fished once every two weeks or even more frequently.

7. The most frequently fished water body by the respondents was Lake Ontario, while Lake Simcoe was the most popular inland lake and the Credit River was the most popular river.

8. The walleye was the most frequently kept and consumed sport fish species. Of the ten most popular species, the first five were warm-water species, and the next five were cold-water species.

9. The average sport fish meal consumed by anglers was 272 grams (9.6 ounces), and the most common consumption frequency was once/month.

10. The average meal size for commercially purchased fish, composed predominately of saltwater fish, was 224 grams (7.9 ounces), and the most common consumption frequency was once/month.

As well as answering the questions, most respondents also provided their own comments. The entire set of comments from the 913 respondents to the 1989 questionnaire is contained in Appendix III.

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1.0 INTRODUCTION

The Ontario Government began monitoring contaminant levels in sport fish in the 1960's when concerns were first raised about the effects of substances such as DDT on aquatic life.

In the late 1960's, the Province of Ontario became aware of mercury contamination due to discharges from chlor-alkali (chlorine production) plants. These sources were either eliminated or severely restricted in the early 1970's, and intensive fish monitoring programs were initiated at the affected sites.

During the 1970's, studies of contaminants in Ontario sport fish were expanded to include such substances as PCBs, mirex, organochlorine pesticides and other organic chemicals.

In 1976, the Province of Ontario started the Sport Fish Contaminant Monitoring Program, to test as many angling areas as possible and assess all statistically reliable data on contaminants in Ontario sport fish. The program is a coordinated undertaking of the Ontario Ministries of Environment and Natural Resources. Advice on human health protection is provided by medical specialists in the Ontario Ministry of Labour and Health and Welfare Canada.

Sport fish are sampled by the Ministry of Natural Resources and analyzed by the Ministry of the Environment laboratories in Toronto and Thunder Bay. The test results are interpreted by staff of the Sport Fish Contaminant Monitoring Program of the Ministry of the Environment, and consumption advisories for Ontario anglers are developed for various sizes of each species tested. The advice is based on federal Health and Welfare Canada guidelines for commercially marketed fish. These advisories are incorporated into the annually updated "Guide to Eating Ontario Sport Fish", which gives consumption advice on sampled species from over 1700 of Ontario's inland lakes, rivers and Great Lakes locations.

2.0 HISTORY OF THE GUIDE QUESTIONNAIRES

There have been four sets of questionnaires associated with the Guide. In 1978, the first year of the Guide, questionnaires were sent randomly to people who had requested a copy of the Guide from the Ministry of the Environment in response to newspaper advertising[1]. A 44% response produced 876 replies. In 1983, a questionnaire was enclosed in the back of the Guide books, and 807 responses were tabulated. In 1986, an expanded version of the 1983 questionnaire was enclosed in the back of the Guide and 1337 responses were used in the calculations. In 1989, questionnaires were enclosed in 100,000 of the 300,000 Guides, and 913 responses were received.

The questionnaires are used in conjunction with the Guide for several purposes. They are useful in determining: the most effective distribution of the Guide; previous Guide use; the use and effectiveness of the guidelines; fishing frequency; the most frequently fished locations; the amount and frequency of fish consumption; and the fish species consumed. As well, readers are given the opportunity to suggest future sampling locations, and to provide comments and suggestions on the Guide and the program. Some of the practical suggestions from these questionnaires have been incorporated into the Guide.

In 1985, a report comparing the 1978 and 1983 questionnaire results was

published[2]. In 1987, a report comparing the results of the first three sets of questionnaires was published[3]. This latest report gives the results of the 1989 questionnaire, with some comparisons to previous surveys, in particular the 1986 survey. A copy of the 1989 survey is given in Appendix I.

3.0 QUESTIONNAIRE RESULTS

3.1 Background of the Respondents

Almost 97% of the respondents were Ontario residents. The Ontario residents were further categorized as being from Northern or Southern Ontario, and the majority were from Southern Ontario (Table 1). These results are similar to those of the previous surveys.

Table 1. Residence of Respondents

Residence	% of Respondents
Southern Ontario	82.7
Northern Ontario	14.2
Another Province	0.8
U.S.A.	2.3

The percentage of males and females responding to these surveys has been very consistent, with over 93% of the respondents to the 1989 survey being male (Table 2).

Table 2. Sex of Survey Respondents

Sex	Survey Year			
	1978	1983	1986	1989
Male	92.9	92.3	93.9	93.3
Female	7.1	7.7	6.1	6.7

Over half of the respondents were in the 26-45 age group (Table 3). This age group has consistently responded most frequently in all the surveys done to date.

Table 3. Age Groupings of Respondents

Age Group (years)	% of Respondents
under 15	5.2
15-25	14.5
26-45	54.6
over 45	25.7

3.2 Guide Distribution Sources and Guide Awareness

The Guides are distributed mainly through Brewers Retail and LCBO Stores, Ministry of the Environment and Ministry of Natural Resources offices and some licence distributors. For cost reasons, questionnaires were enclosed in only 100,000 of the 300,000 Guides, and almost all of these Guides with questionnaires were distributed through Brewers Retail and LCBO Stores. Therefore, the 1989 Guide survey distribution is not comparable to the previous surveys.

Over 80% of the 1989 Guides were obtained from either Brewers Retail or LCBO Stores. These outlets provide a valuable service not only because the Guide displays in these stores help to make the public aware of the Guide, but also because these outlets are usually easily accessible distribution sources to the Ontario public. The assistance of the Brewers Retail and the LCBO in the success of the Guide distribution is greatly appreciated.

Table 4. How Respondents First Became Aware of the Guide

Source	% of Respondents	
	1986	1989
Saw it on display	67.2	68.6
Told by friend or relative	19.0	19.8
Advertisement	3.2	2.3
Told by government official	2.6	2.2
Newspaper, radio or T.V. story	4.2	3.9

Respondents were asked how they first became aware of the Guide, and the results are shown in Table 4. The responses for the 1986 and 1989 surveys were similar. For over two-thirds of the respondents, their first awareness of the Guide was seeing it on display, usually at Brewers Retail or LCBO Stores.

3.3 Use of the Guide

There is a continually increasing awareness of the Guide program, and correspondingly an increasing use of the Guide. In the 1989 Guide survey, 73.3% of the respondents had obtained and used Guides prior to 1989. Figure 1 shows the % previous Guide use by these respondents.

As a result of the format change, more Guides were produced in 1989, and there was an increased distribution to fishing licence distributors. This has resulted in a greater exposure of the Guide to the angling public, as indicated by the 26.7% first time Guide users.

3.4 Fishing Frequency

The most frequent responses to the question regarding fishing frequency were "more than once a week" and "once every two weeks". Over 60% of the respondents fished once every two weeks or even more frequently, which is similar to the 1986 survey results. Table 5 shows the % fishing frequencies for each category chosen by the 1989 respondents (for the "on vacation only" and "other" categories, space was provided for entering a numeric value, and most respondents who chose one of these categories filled in a value).

Figure 1.

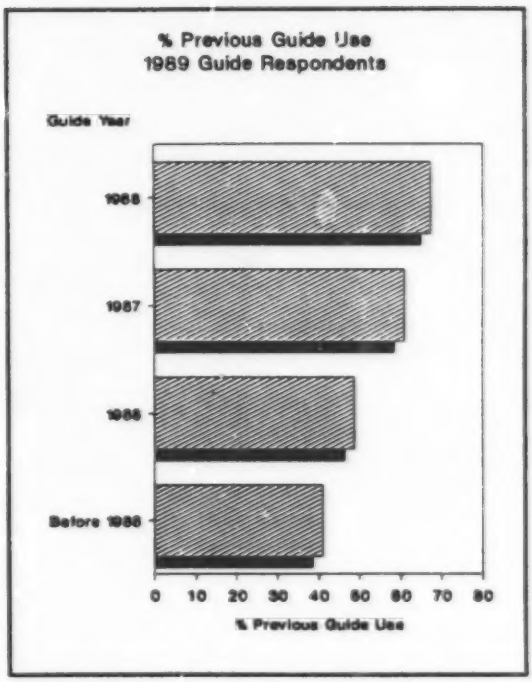


Table 5. Fishing Frequency by Respondents

Frequency	% of respondents
on vacation only	11.8
daily	3.5
>once/week	22.6
once/week	14.5
once/2 weeks	19.2
once/month	11.8
once/4 months	3.5
once	1.1
never	1.4
other	10.6

3.5 Fishing Locations

For both lakes and rivers, respondents were given a list of the most popular locations from previous surveys, as well as an "other" column in which to write in the most frequently fished location if it was not listed. Table 6 lists the most commonly fished bodies of water for the 1986 and 1989 surveys, in the four categories:

i) the ten most popular angling areas
ii) the ten most popular inland lakes
iii) the ten most popular rivers
iv) the Great Lakes

The most frequently named water bodies were Great Lakes, in particular Lakes Ontario, Huron and Erie. Lake Ontario was the most frequently fished of the Great Lakes, however, Lake Huron/Georgian Bay was almost as frequently fished. The order of frequency of the Great Lakes remained the same for both the 1986 and 1989 surveys. However, the relative frequency of anglers fishing Lake Ontario has declined with each of the past three surveys, and Lake Huron/Georgian Bay has become increasingly more popular. This may be at least partially due to the fact that there are fewer consumption restrictions for sport fish from Lake Huron/Georgian Bay than from Lake Ontario. The continued popularity of certain areas with anglers is indicated the fact that eight of the top ten most popular angling areas are the same (although in different frequencies) in both the 1986 and 1989 surveys.

Lake Simcoe was the most popular inland lake, as in all previous surveys. The ten most popular inland lakes in 1989 were also the ten most popular in 1986, although in a somewhat different order of frequency. As in 1986, the Kawartha Lakes chain appears to be very popular with anglers, as eight of the top ten inland lakes fished were Kawartha Lakes. In 1989, the Credit River was the most frequently fished river, followed very closely by the Grand River, which was the most popular river in the 1986 survey. Eight of the top ten rivers were named in both surveys, with the Ganaraska River and Niagara River in 1989 replacing the Nottawasaga River and St. Lawrence River from the 1986 list. The Trent River had the greatest increase in relative popularity between 1986 and 1989.

3.6 Sport Fish Caught and Consumed

Respondents were asked to select which species they caught to consume, and the most popular species were listed, as well as a space for "other" responses. As in all previous surveys, the walleye was the most frequently caught and consumed sport fish. The top eight species consumed were the same for the 1986 and 1989 surveys, with very similar % relative frequencies (Table 7). For the other two species, chinook salmon and coho salmon in 1989 replaced rock bass and whitefish from the 1986 survey.

Table 6. Relative Popularity of the Most Frequently Fished Lakes and Rivers in the 1986 and 1989 Surveys

1986 Lake/River	1986 Relative Popularity(%)	1989 Lake/River	1989 Relative Popularity(%)
1. Ten Most Popular Angling Areas			
1. Lake Ontario	22.5	1. Lake Ontario	19.5
2. Lake Huron/ Georgian Bay	20.2	2. Lake Huron/ Georgian Bay	19.3
3. Lake Erie	13.5	3. Lake Erie	13.5
4. Lake Simcoe	10.1	4. Lake Simcoe	10.0
5. Grand River	6.9	5. Credit River	7.1
6. Credit River	6.5	6. Grand River	6.9
7. Ottawa River	5.8	7. Trent River	6.5
8. Rice Lake	5.2	8. Lake Scugog	6.4
9. Saugeen River	4.7	9. Lake Nipissing	5.8
10. Lake Scugog	4.6	10. Saugeen River	5.0
	100.0		100.0
2. Inland Lakes			
1. Lake Simcoe	27.5	1. Lake Simcoe	23.9
2. Rice Lake	14.2	2. Lake Scugog	15.3
3. Lake Scugog	12.5	3. Lake Nipissing	13.7
4. Lake Nipissing	11.8	4. Rice Lake	11.7
5. Buckhorn Lake	7.8	5. Buckhorn Lake	9.8
6. Pigeon Lake	7.6	6. Pigeon Lake	7.6
7. Sturgeon Lake	5.4	7. Balsam Lake	6.3
8. Balsam Lake	4.9	8. Sturgeon Lake	5.8
9. Stony Lake	4.2	9. Stony Lake	4.5
10. Chemung Lake	4.1	10. Chemung Lake	1.4
	100.0		100.0
3. Great Lakes			
1. Lake Ontario	36.8	1. Lake Ontario	33.9
2. Lake Huron/ Georgian Bay	33.2	2. Lake Huron/ Georgian Bay	33.5
3. Lake Erie	22.2	3. Lake Erie	23.3
4. Lake St. Clair	5.6	4. Lake St. Clair	5.1
5. Lake Superior	2.2	5. Lake Superior	4.2
	100.0		100.0
4. Rivers			
1. Grand River	14.7	1. Credit River	13.6
2. Credit River	13.9	2. Grand River	13.3
3. Ottawa River	12.4	3. Trent River	12.4
4. Saugeen River	10.1	4. Saugeen River	9.7
5. French River	9.3	5. Ottawa River	9.5
6. Thames River	8.8	6. Thames River	9.3
7. Trent River	8.0	7. French River	8.6
8. Nottawasaga River	8.0	8. Ganaraska River	8.3
9. St. Lawrence River	7.8	9. Niagara River	7.7
10. Rideau River	7.0	10. Rideau River	7.6
	100.0		100.0

Table 7. Relative Popularity of the Ten Most Frequently Caught and Consumed Sport Fish Species by 1986 and 1989 Respondents

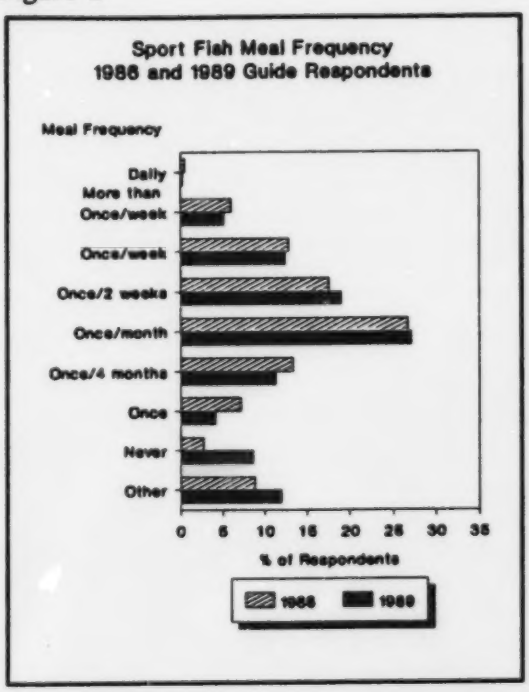
1986		1989	
Species	**Relative Popularity(%)**	**Species**	**Relative Popularity(%)**
1. Walleye	16.2	1. Walleye	18.7
2. Smallmouth Bass	15.8	2. Smallmouth Bass	15.9
3. Yellow Perch	13.3	3. Yellow Perch	12.1
4. Northern Pike	13.0	4. Northern Pike	11.2
5. Largemouth Bass	9.9	5. Largemouth Bass	9.7
6. Rainbow Trout	9.1	6. Rainbow Trout	9.2
7. Lake Trout	7.5	7. Lake Trout	7.8
8. Brook Trout	6.6	8. Brook Trout	6.1
9. Rock Bass	5.2	9. Chinook Salmon	4.9
10. Whitefish	3.4	10. Coho Salmon	4.4
	100.0		100.0

The increased salmon stocking in the Great Lakes, as well as the number of Great Lakes salmon derbies may account for the increase in the relative popularity of the chinook and coho. The top five species consumed were warm-water species, indicating the importance of the warm-water fishery in Ontario.

3.7 Sport Fish Consumption

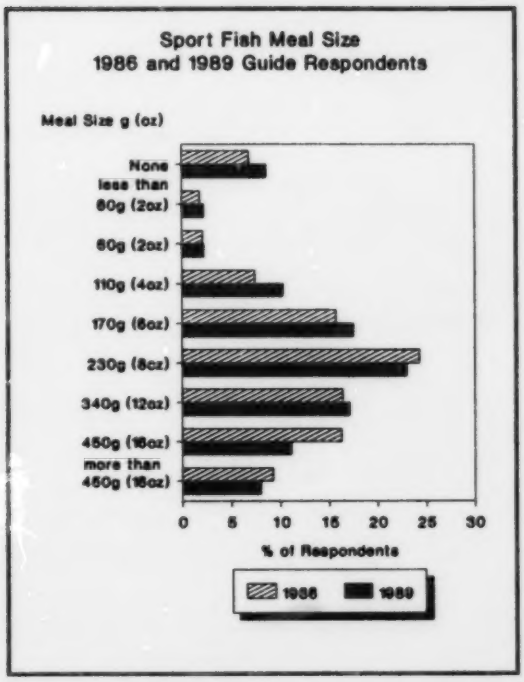
The questionnaires are very useful in providing information on sport fish consumption patterns, which can be used in calculations such as the determination of contaminant intake through sport fish consumption. Respondents were asked how frequently they ate fish caught by angling from Ontario waters, and, in Figure 2, the results of the 1989 survey are compared to the 1986 results. The results are similar in that 57.8% and 61.7% respectively of the 1986 and 1989 respondents consumed fish once a month or even more frequently. The most frequent meal frequency in both surveys was once/month. Over 25% of the respondents in both surveys indicated this meal frequency.

Figure 2



The respondents were also asked how much fish caught by angling from Ontario waters they would eat at a single meal, and the results of the 1986 and 1989 surveys are compared in Figure 3. The majority of the respondents in both surveys (71.0% and 59.2% in 1986 and 1989 respectively)

Figure 3



consumed 227 grams (8 ounces) or more of sport fish per meal, and 227 grams (8 ounces) was the most frequently mentioned meal size in both surveys. The calculated mean meal size (see Appendix II for calculations in this section) was very similar in 1986 and 1989, being 295 grams (10.4 ounces) and 272 grams (9.6 ounces) respectively. Further calculations using the 1989 results indicated that the average sport fish consumer ate 27 meals/year, which implies an average daily consumption of 20.2 grams (0.71 ounces) of sport fish/day This daily figure compares well with the 1986 consumption figure of 24.7 grams (0.87 ounces)/day.

3.8 Commercial Fish Consumption

In order to determine the total fish consumption from both sport and commercial fish, the question was asked in the 1989 survey: "How frequently do you eat fish (freshwater or saltwater) purchased from a store?" Commercial fish were consumed slightly more frequently than sport fish as 66.7% of the 1989 respondents ate commercial fish once a month or more frequently. This compares closely to the 70.7% result from the 1986 survey. As with the sport fish consumption, the most frequent commercial fish consumption response in both the 1986 and 1989 surveys was once/month.

The mean meal size for a commercial fish meal was somewhat smaller than that of a sport fish meal. In the 1989 survey, the mean commercial fish meal size was 227 grams (7.9 ounces), which is close to the 247 grams (8.7 ounces) result from the 1986 survey. The most frequently mentioned meal size was 227 grams (8 ounces), which was the same as the sport fish meal size. An average of 31 commercial fish meals/year were consumed by the 1989 respondents, which is higher than the 27 sport fish meals/year reported in 1986. However, because of the lower mean meal size, less commercial fish was consumed, as the daily commercial fish consumption figure was 19.1 grams (0.68 ounces)/day for the 1989 respondents. As in all previous surveys, the percentage of respondents who never eat commercial fish was higher than those who never eat sport fish (13.4% and 8.6% respectively).

The survey also enabled the determination of the types of commercial fish which were consumed. The relative frequencies of the ten most frequently consumed commercial fish types for both the 1986 and 1989 surveys are listed in Table 8. The saltwater fish species were consumed much more frequently than the freshwater species, and in 1989 the top eight commercial fish consumed were saltwater fish. Although haddock was the most frequently consumed commercial fish,

Table 8. Relative Popularity of the Ten Most Frequently Consumed Commercial Fish by 1986 and 1989 Respondents

1986 Species/Type	Relative Popularity(%)	1989 Species	Relative Popularity(%)
1. Tuna	14.8	1. Haddock	13.9
2. Fish Sticks	14.4	2. Cod	13.3
3. Cod	14.2	3. Halibut	13.2
4. Halibut	13.8	4. Boston Bluefish	13.1
5. Haddock	13.3	5. Salmon	12.7
6. Salmon	12.9	6. Tuna	9.9
7. Rainbow Trout	5.6	7. Sole	9.0
8. Smelt	4.5	8. Ocean Perch	6.2
9. Yellow Perch	3.4	9. Rainbow Trout	4.8
10. Whitefish	3.1	10. Smelt	3.9
	100.0		100.0

the top five species were all quite close in frequency, as was the case in the 1986 survey. The most frequently consumed freshwater commercial fish, the rainbow trout, was consumed only about a third as often as the top saltwater fish.

3.9 Changes in Fishing and Fish-Consuming Habits

The question was asked in all surveys: "Has the information in this guide led to a change in your fishing and/or fish consuming habits?" The Guide information has proven to be useful to many of the respondents, as 77.3% of the respondents indicated that their fishing and/or fish-consuming habits changed after using the Guide. This is a significant increase compared to the 1986 survey, when 48.9% gave a positive response to this question. In the 1986 survey, respondents were asked to comment on how their habits had changed. The most frequently mentioned responses were included as options in the 1989 survey, in order to give a more accurate account of the influence of the Guide. Over 80% of the respondents who indicated that their habits had changed chose the response "awareness of fish contaminant problem". This awareness could influence both their choice of fishing locations (ie. they may change to fishing in areas with few or no consumption restrictions) and their fish consumption (ie. they no longer consume all fish caught, but check the Guide before consuming any fish).

Table 9 gives the % frequency of responses by those respondents whose fishing and/or fish-consuming habits changed (these results do not total 100% as more than one answer was sometimes given).

In the 1986 survey, a higher % responded "no" to this question, and unfortunately many did not comment as to why their habits remained unchanged. Therefore, as with the "yes" response, options were provided to pinpoint the reason for no change. It was felt that many of these "no" responses could be justified for reasons such as the areas fished were not in the Guide, in which case no guidelines were available. Table 9 lists

Table 9. Changes in Fishing and/or Fish Consumption Habits of 1989 Respondents

"Yes" Response		"No" Response	
Change	%	Reason	%
Awareness of fish contaminant problem	80.9	Don't catch or eat enough fish	30.7
Eat fish within guidelines	10.9	Fish caught are in unlimited consumption category	17.6
Return larger fish	4.0	Areas fished not listed in Guide	15.6
Eat less fish	1.7	Don't eat fish	8.8
Changed fishing locations	1.3	Other	10.2
Eat more fish	0.6		
Stopped eating fish	0.6		
Other	0.9		

the % responses in this category, with the most frequent response being "don't catch or eat enough fish". As well, some of the respondents either caught fish which were in the unlimited consumption category, or did not eat fish at all.

The results of this question have indicated that the Guide is very useful in making the angling public more aware of the problem of contamination in fish as well as making them health-conscious enough to dictate their fishing habits according to the Guide information. Also, good conservation methods are being practiced by anglers who keep the smaller fish for consumption and return the larger breeding stock.

3.10 Use of the Guidelines

In the 1989 survey, two additional questions were asked to determine if Guide users were following the Guide advice. The two questions were: a) "When you catch a fish you wish to keep, do you check the Guide for consumption advice?" and b) "If the consumption advice for your catch is not in the category, do you follow this advice?"

For question a), 75.5% of the respondents indicated that they do check their catch prior to consumption. Some of the remaining 24.5% may be people who are fishing locations where there are no consumption restrictions on the species which they are fishing for (eg. Lake Huron chinook salmon) and therefore there is no need to check the Guide each time they catch a fish. When there are some consumption restrictions (ie. question b)), 85.0% of the respondents follow the guidelines. These results and the results of the "habits" question indicate very firmly that the information in the Guide effectively influences the consumption patterns of Ontario anglers.

3.11 Suitability of the Guide

The question was asked in the 1989 survey: "did the information in this Guide meet your needs?" That the Guide is a practical information source for anglers and sport fish consumers is indicated by the fact that 87.2% of those replying responded "yes" to this question. A number of the respondents who replied "no" indicated that their fishing location was not listed in the Guide, and therefore their consumption information needs were not met. This was

indicated by the results of the next question which asked: "did it list all the lakes and rivers you were interested in?" Four options were given - all, most, some and none - in order to provide a simplified response. The results were positive as 30.4% of the respondents replied "all", 45.8% replied "most", 21.5% replied "some" and only 2.3% replied "none". There are over 250,000 lakes and uncounted rivers in Ontario and it would be impractical to sample them all. However, the value of the Guide to the majority of its users is indicated by the fact that the most popular fishing locations have been sampled.

Another positive response was to the question: "Do you find the revised text at the beginning of the Guide useful and informative?" There were major changes to the format of the 1989 Guide in order to reduce the size to enable more copies to be produced. The front text was changed significantly from previous editions, and for the first time, a simplified key to using the Guide was included. This information was well received as 89.7% of the respondents found the text useful and informative, while only 1.1% did not, and 9.2% did not read the text.

3.12 Comments

One of the most important functions of the Guide questionnaires is to enable the public not only to suggest lakes and rivers for sampling, but also to suggest improvements to the Guide. As well, the public can provide useful comments on all aspects of the program. Respondents were given the opportunity to make suggestions or provide comments in three of the questions in the 1989 questionnaire.

Respondents were asked to suggest additional lakes or rivers to be tested, and many suggestions were received. A list was compiled and will be considered when future sampling locations are selected.

A large number of suggestions were received in response to the question: "In your opinion, in what way could this Guide be improved?" These suggestions provided the program with a very good idea of the changes that the Guide users would like to see in future Guides. The most frequent request among the suggestions was for both more water bodies and more species to be tested. Other common suggestions included larger print size, better paper, coloured fish pictures, more maps and a "catch and release" section. Each of these suggestions is discussed in the following paragraphs.

The introductory text in the Guide gives an explanation of the reasons for selecting a particular location for sampling. These reasons may include:

- it is a popular angling area
- there is a known or suspected source of pollution nearby
- it is a major source of food for local inhabitants
- it is being opened for recreational development
- it is part of long-term monitoring study of contaminants in fish

The selection of testing sites is an ongoing process and public input is received from sources such as the questionnaire responses.

It is neither economically feasible nor necessary to test all fish species in a particular water body. An explanation of the species selected for testing is given in the introductory Guide test. It is important to note that not all species accumulate a particular contaminant at the same rate.

For example, top predators such as walleye and northern pike accumulate mercury to a much higher level than do whitefish, which feed lower down on the food chain. If low levels of mercury are found in the top predators, then testing of other species may not be necessary.

A smaller print size was used to reduce the number of pages, as part of an overall format change to enable more Guides to be produced for the same cost. However, because of a number of suggestions received in the questionnaire, the print size will be enlarged for the 1990 Guide.

The 1989 Guide was printed on recycled paper which was not only an environmentally sound practice but also was a cost-saving factor which enabled a greater number of Guides to be printed, allowing for a wider Guide distribution.

Coloured pictures of Ontario sport fish are provided in a poster distributed by the Ministry of Natural Resources. For cost reasons, it was decided to retain the black and white illustrations. However, many of the illustrations have been improved in the 1990 Guide through the artistic efforts of University of Guelph student Rebecca Brebner.

Page size limitations do not allow for the inclusion of maps on a reasonable scale. However, readers can make use of the Ontario road map and the Canadian Government topographic maps. Margins of these maps have latitude and longitude values which enable readers to locate each water body in the Guide using the latitude and longitude given under the location name in the Guide.

Because of the number of suggestions received in the 1989 questionnaire, as well as the increasing popularity of "fishing for sport", a "catch and release" section will be included in the 1990 Guide text.

The final statement in the 1989 questionnaire was: "Other comments you may have on this program and/or publication." Many comments were received, and the vast majority of these were very favourable toward the Guide and the program. Two examples of comments received in the 1989 survey were: "excellent, enjoyed it and using it constantly" and "I found this book to be informative and extremely helpful. I will continue to get this book annually." These comments serve to further re-affirm that the Guides serve a very worthwhile purpose as a source of useful information to the angling and fish-consuming public. The wide variety of interesting and informative comments are included verbatim (with no spelling or grammatical corrections) in Appendix III.

4.0 CONCLUSION

The results of the 1989 and previous Guide questionnaires, together with the large number of favourable comments, indicate that the "Guide to Eating Ontario Sport Fish" is widely used and appreciated by many Ontario anglers and sport fish consumers. There is a definite need to continue serving the Ontario public in the future with this useful information, and to continue with the questionnaire in order to achieve proper public feedback.

5.0 REFERENCES

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4. Ontario Ministry of the Environment. 1989. **Guide to Eating Ontario Sport Fish**. Toronto.

APPENDICES

I 1989 Questionnaire

II Calculations Used for Sport Fish Consumption Figures

III 1989 Questionnaire Comments from Respondents

Appendix I

Questionnaire

The Ministry of the Environment sport fish contaminant monitoring program would appreciate your co-operation in completing and returning this postage-free questionnaire. Your answers and comments will help us to improve the guide and the effectiveness of the program.

1. What is your age?
   Under 15 years | 15-25 years | 26-45 years | over 45 years

2. What is your sex?
   Male | Female

3. Are you a resident of:
   Southern Ontario | Northern Ontario | Another province | The U.S.A.

4. Where did you obtain your 1989 guide?
   Brewer's Retail store | L.C.B.O. store | From a friend or relative | By mail from a govt office | At a govt office | Other: _____

5. How did you first become aware of the guide?
   Saw it on display | Advertisement | Told by govt official | Newspaper, radio or TV story | Told by friend or relative | Other: _____

6. Have you obtained and used the guide in previous years?
   No | Yes | If yes, in which year(s)?
   1988 | 1987 | 1986 | Before 1986

7. How often did you go fishing in Ontario throughout 1988?
   On vacation only (__ times) | Daily | More than once a week | Once a week | Once every two weeks | Once a month | Once every 4 months | Once | Never | __ times | Other: _____

8. What lakes and rivers in Ontario did you fish in 1988?

   (a) Lakes

Balsam	Nipissing	Scugog
Buckhorn	Ontario	Simcoe
Erie	Pigeon	Stony
Huron/	Rice	Sturgeon
Georgian Bay	St. Clair	Superior

   Other: your most frequently fished lake, if none of the above _____

   (b) Rivers

Credit	Niagara	St. Lawrence
French	Nottawasaga	Saugeen
Ganaraska	Ottawa	Thames
Grand	Rideau	Trent

   Other: your most frequently fished river, if none of the above _____

9. What species of fish did you keep to eat in 1988?

Brook Trout	Crappie	Smallmouth Bass
Brown Bullhead	Lake Trout	Smelt
Brown Trout	Largemouth Bass	Splake
Carp	Muskie	Sunfish
Catfish	Northern Pike	Walleye (Pickerel)
Chinook Salmon	Pink Salmon	Whitefish
Cisco (Herring)	Rainbow Trout	White Sucker
Coho Salmon	Rock Bass	Yellow Perch

   Other: _____
   Did not keep fish to eat

10. How often did you eat these fish in 1988?
    On vacation only (__ times) | Daily | More than once a week | Once a week | Once every two weeks | Once a month | Once every 4 months | Once | Never | __ times | Other: _____

11. How much fish caught by angling from Ontario waters do you eat at a single meal?

None	110g (4oz)	340g (12oz)
Less than 60g (2oz)	170g (6oz)	450g (1lb)
60g (2oz)	230g (8oz)	More than 450g (1lb)

12. a) How often do you eat fish (freshwater or saltwater) purchased from a store?

Daily	Once every 4 months
More than once a week	Once
Once a week	Never
Once every two weeks	Other:___ times

b) If you purchase fish from a store, please indicate which fish you would normally purchase to consume?

Boston Bluefish	Ocean Perch	Tuna
Cod	Rainbow Trout	Turbot
Haddock	Salmon	Walleye
Halibut	Smelt	Whitefish
Lake Trout	Sole	Yellow Perch

13. How much fish purchased from a store do you eat at a single meal?

None	110g (4oz)	340g (12oz)
Less than 60g (2oz)	170g (6oz)	450g (1lb)
60g (2oz)	230g (8oz)	More than 450g (1lb)

14. a) When you catch a fish you wish to keep, do you check the guide for consumption advice? Yes No

b) If the consumption advice for your catch is not in the ⇦ category, do you follow this advice? Yes No

15. Has the information in this guide led to a change in your fishing and/or fish-consuming habits?

Yes No

If Yes, in what way(s)?

Awareness of fish contaminant problem	Eat more fish
Eat less fish	Stopped eating fish
Eat fish within guidelines	Changed fishing locations
Return larger fish	Other:_____

If No, why not?

Don't eat fish	Fish caught are in the unlimited consumption category
Don't catch or eat enough fish	
Areas fished not listed in guide	
Other: _____	

16. a) Did the information provided in this guide meet your needs?

Yes No If No, why not?

b) Did it list the lakes and rivers you were interested in?

All Most Some None

c) Could you suggest additional lakes and rivers to be tested?

_____

17. Do you find the revised information at the beginning of the guide useful and informative?

Yes No Didn't read it

18. In your opinion, in what way could this guide be improved?

_____

_____

19. Other comments you may have on this program and/or publication.

_____

_____

_____

Thank you for taking the time to assist us.

Appendix II

Calculations used for Sport Fish Consumption Figures

The following methods were used to calculate the sport fish consumption figures used in this report. As well, these methods were applied to determine the commercial fish consumption figures.

a) **Mean Meal Size**

The mean meal size was calculated from responses to question 11 in the questionnaire, which asked "How much fish caught by angling from Ontario waters do you eat at a single meal?" The calculations were done initially in ounces, and for the "less than 60g (2 oz)" response, a value of one ounce was assumed. As well, for the "more than 450g (1 lb)" response, 20 ounces was assumed. The number of responses for each size category was determined and the results of multiplying the number of responses by the meal size were totalled (eg. 18 x 1 oz + 20 x 2 oz, etc.). The number of respondents who did not consume any sport fish were deleted from the calculations. The total was divided by the number of fish-consuming respondents to derive an average meal size of 9.6 ounces or 272 grams.

b) **Number of Sport Fish Meals Consumed/Year**

The number of sport fish meals consumed/year was determined from the responses to question 10, which asked "How often did you eat these fish in 1988?" All the responses were converted to a number of days out of the year (eg. "daily" = 365, once/week = 52 etc.). For the "greater than once/week" response, three times/week (156) was assumed, and numbers were used, as given, in the "on vacation only", "___ times" and "other" categories. The number of responses for each category, multiplied by the equivalent number of days, was totalled and divided by the number of respondents who consumed sport fish. This gave an average figure of 26.96 or approximately 27 meals/consumer/year.

c) **Daily Sport Fish Consumption Figure**

This figure is derived from the following calculations:

number of meals/consumer/year (26.96) X mean meal size (9.64 oz) = number of ounces consumed/year (259.89)

This result was converted to grams/year (multiplying by the conversion factor of 28.35 grams/ounce), and was divided by 365 days to give a daily sport fish consumption figure of 20.19 grams/day.

Appendix III

1989 Questionnaire Comments from Respondents

The following are verbatim comments received in reply to the statement: "Other comments you may have on this program and/or publication." Please note that these comments were not corrected for grammatical or spelling errors. The questionnaires were numbered as they were received, and when a number is missing, there was no comment given by the respondent.

1. Civil servants organize and clean and protect our waters.
5. I am now very aware of to tell if my fish is safe to consume.
10. I would like chemical checks in southern built up areas because of run off etc.
13. All my friends appreciate the value of this publication. Thank you.
14. Could you provide information on eating game birds/waterfowl or game animals in a different publication? e.g. what about waterfowl that eat fish, clams, snails, etc.? Do they accumulate unsafe mercury levels.
18. Book should be in schools and info in papers to let public learn in tip form about fishing rules and eating guide lines.
24. This booklet is a great idea. My wife and I have used it since 1986.
26. I do not like fish but I go fishing alot and I give alot of fish away but I go by the Guide.
28. It's very informative and it is, for people who are health conscious, nice to have so they an check fish that they are going to consume.
29. Commercial fishing in Lake Erie should be stopped.
34. Its a step in the right direction making it apparent to the public of our problems with pollution on our fisheries. Keep up the good work.
36. 1988 printing is better than 1989.
43. One of the best-ever government publications. Don't stop. Are our $10 licence fees helping to pay for this?...if so that's great, but I'd like to see our taxes reduced.
44. First year I've had the Guide. Good idea.
46. Thank you very much.
50. Increase public awareness on conservation/preservation of Canada. Include tourists.
52. Your sizes are not accurate in Fair Banks Lake I have gotten small mouth Bass over 17 inches long.
53. This is an excellent guide. Keep it up!
56. Well presented in easy to read fashion.
57. Its nice to have free. Thank you.
59. Your guide is a very knowledgeable piece of emfo.
61. Good guide but more re-stocking programme needed on heavily fished lakes.
63. Excellent initiative. Test more lakes. Set up an angler"send-in" sample program to identify sites for future testing.
66. You should ask for a small "donation", not a price, to enable you to make this Guide the finest and most comprehensive Guide for the Ontario angler.
69. Keep the good work. Stop mining industries to stop wasting the lakes.
71. No improvement needed. Good work people!
72. Keep testing our waters.

75. Doing a great job now available to everyone keep up the good work don't discontinue.
78. Be more strick with large companys on pollution and controlling fishing companys more on overfishing. So that public liscence fishermen can catch quota once in a while.
79. Keep up the good work.
84. Good publication.
86. Useful and informative.
88. I feel that this Guide/program is a very valued service. Most of my fishing plans are a result of checking with the Guide first. Do other provinces also have this service? Could you publish phone #'s to send away for.
90. The guide is very informative, but continue to monitor changes in fish contaminants. Weeds in lakes, do certain types of weeds harmful to fish species.
91. It's fine. Excellent service but needs to be publicized more widely.
97. Thank you for making this information public.
100. Wish to see it continue!
101. No, the book if fine the way it is. Excellent work, thank you.
105. Good idea, more money should be used for conservation and enforcement of fishing regulations.
106. Interesting publication - a bit scary as some lakes especially northern or remote lakes have pollutants in them which you aught not expect.
108. Good.
109. Keep up the good work!
110. According to 1988 Guide, there wouldn't be one in 1989. I'm glad there was - annual Guides are useful not only to have up to date info on hand but to compare changes over the years.
111. I found this Guide informative and it put my mind at ease about eating fish from different locations. Thanks!
115. Great idea towards public awareness of water concerns now!
116. I think this Guide is very informative.
117. It is an excellent guide! Keep up the good work.
119. More testing and info on dioxins and forans, especially with respect to finding of these substances in proximity to pulp and paper plants. This is the lurking time-bomb in our sport fishing industry. One just has to look at what's happened in Howe Sound, B.C.(outside Vancouver) as a result of pulp and paper.
121. Doing a fine job.
122. I found it very useful.
131. Its fine the way it is. Should continue to be annual.
135. Thanks!
136. Definitely need more dioxin - furan tests as much of ONT. downstream from pulp mills. In B.C. (my home province) these contaminants were long ignored and suddenly "discovered" in serious, health-impacting, concentrations in many fishing areas.
138. Industrial spills have happened a number of times at the Eldorado plant at Port Hope (Ganaraska river) Why not charge this company and force cleanup of this harbour.
141. I am a tournament fisher I know we sometimes are not liked I'm glad to see your people tagging and monitoring our fishing habits and I hope that you will find our handeling of these fish to be in line. This care should be shown in your Guide.
142. No improvement needed at the present time.

148. I like fishing for mostly relaxing and look forward to your guide to read up on for any new information.
149. It's fine now. At least it's free.
151. Tell people that if you hang fish by their tails in the freezer all the mercury will drop with the cold. When fish is frozen cut off the head! This works for me.
155. Very good!
156. I really believe it is a good guide it sure helpful me.
157. Excellant source of information on the pollution problems in our province.
158. Copies of guide should be sent to every factory/industry that dumps pollutants into rivers and lakes.
162. Good!
163. I appreciate the guide and pick up a new one every year. The fish identification section is a good section as this information is not always readily available to the uninitiated.
164. This book is an excellent idea. It really lets you know what we are doing to our waters!
165. Stock other Lake Ontario rivers besides the Credit. Have more conservation officers who do their job right.
167. Was always unsure about Lake Ontaro fish; now I know the facts which is helpful.
171. More control of lamprey eel.
172. Program and publication is excellent and informative. Thank you.
175. People who don't fish seriously don't read a guide. A good fisherman reads and is up to date on all his periodill's.
178. 1988 Guide Book was better than 1989, this issue of 1989 is only 1/2 the size in English compare to 1988.
184. It is an excellent guide as is.
186. Would like to see larger fines and stiff jail terms given to industrial water pollution.
190. Publish whats being done to pollution violators and what's being done to improve the quality of our fishery instead of telling us not to eat the fish.
194. Distribution of this book should be anywhere you can purchase anything that as to do with fishing.
197. I find it informative enough. So I don't think you could improve it any better than it is already.
198. I think everything is covered, how, why and what is tested, all the major lakes and fishing information as well as I.D. charts. I think that for a free gov't publication it is great.
200. Please continue stringent monitoring. Use money from the licenses for public awareness campaignes (radio/T.V.), HIT THE SCHOOL SYSTEM!!! The kids will pass on the info at home!
201. Very helpfull for us. Thank you.
204. Spend more money on the Lamprey eel program don't stop fighting them.
206. I find it very informative for information that I need for fishing in my area.
208. More stalking of lake Huron - Bruce Co. area for salmon and trout. *Stop commercial fishing of great lakes.
209. Keep it up its very nice to see and interesting also. Motivates you to be aware of fishing and eating.
215. Would like to see fishing regulations enforced more stringently!!

217. I would be interested to know if the pollution is man made or natural as in the case of mercury for example. Also I would like to be able to bring fish in for testing, from some of the smaller more obscure lakes that I frequent.
219. Exceelent publication - Keep up the good work.
220. Very Good.
232. The Guide is useful although some of species lists , are not complete. Maybe the survey was not conducted on the species missed and in future the lists will be complete for each lake.
236. Quite informative, keep up the good work!
238. This is an exellent publication I have used it since it was first available and wouldn't go without it.
239. Very helpful!
243. Very informative.
246. Very difficult to get a hold of a copy of this years guide. (A lot of people agree)
254. Your publication is excellent but it will not change fish consumption for poor and impoverished persons.
257. The guide is a very helpful guide to the consumption of fresh and saltwater fish. But, I'm sure it makes everyone realize our waters are really getting polluted.
259. Excellent publication.
265. Keep up the good work.
268. Keep up the good work.
276. Guide is a great help.
280. It is a vurry good book.
281. I am a real estate agent and list and sell property - mostly stoney and clear lake area and mainland and islands in the Kawartha Lakes. This publication is a very useful tool when introducing "my" lakes to clients.
283. Feed contaminated fish to principals of major polluters, government officials on both U.S. and Canadian sides. World wide sterilization of populus. Extensive limestoning of waterways to neutralize the acid rain effect.
285. I think this is a good thing for fishermen to know what there eating.
286. If there were size limits on all fish then supplies would be improved.
291. What can we do as general public to help clean up lakes and rivers!
294. Although not a concern with this publication or program I would like to see better funding for lamprey control and better use of the funds of the anglers' licence.
297. I preferred the format and quality of the 1987 Guide.
303. An excellent and informative publication.
304. I believe it to be an excellent way to inform more people of the problem of fish contamination.
309. I feel it was informative and interesting.
313. Charge $5.00 for book. Government shouldn't be giving it away for "free".
315. I have always thought that the Ministry is doing a good job of informing sportsmen of Ontario.
320. This has been very helpful in finding new spots to fish. It also allows me to know which tackle to use in a given location due to species in a given area.
322. For the small percentage of people who fish, I feel this is one more example of the waste of tax payers money. Government ministries should be more concerned with economy.

331. I can't condone the use of cheap printing paper on the 89 Guide especially when there is a licence fee being paid out. But surprisingly super for a Guide that wasn't supposed to be.
332. Good program - Keep it up.
333. As my fishing time is quite limited the Guide, as is, is OK for me.
337. Don't spend so much money on the Guide and put more into stocking and conservation.
342. Covers all aspects very well. Catch the polluters.
343. One of the few excellent Guides which is available free of charge. Thank you for providing this service.
344. It's a fantastic idea!!!
346. The Ministry of the Environment should stock many large lakes with fishes, it also should have some kind of lotteries systems for the avid fisherman.
348. Overall it is a great book and I'm sure it is a great help to anglers coming into the province and the ones already fishing here.
354. The list of "bad" lakes continues to grow. How could we have ruined our lakes and rivers so wantonly.
356. Name the biggest polluters of these and/or other toxins so the public can become aware and hopefully apply pressure to these companies to change their deposit practises.
359. Good.
360. What I have to complain about is the governments restrictions to my inalienable right to fish when and where I want to fish, and the way I want to, therefore fishing seasons, licenses, wardens and the such, suck!
363. Very informative, the Guide has opened a lot of eyes to the fish contaminant problem. A great public service, thanks.
366. I like using the Guide to advise me in what fish to eat. I also use to research new areas to fish (i.e. species found, what sizes, location, etc.). Thanks for another great Guide.
371. I think it's a great program.
374. Keep it up!
379. Keep it up!
382. Each person getting a fishing licence should receive a copy with their license. Do the same standards apply when ice fishing (being a different environment)?
388. Very well done!
390. Put a size miniume limite on walleye in the Kawarthawas say about 18".
393. You've put out a book on lakes and rivers. I would like to see a book on creeks.
399. I think it is a good thing putting this publication out. Because it makes us aware of the fish we are eating.
401. Something should be done about the eel program in Lake Ontario.
403. For my needs it is very useful.
404. Discontinue. Who reads it? Indians? Eskimos? Waste of tax money.
408. It would be interesting to have any fish stocking programs listed along with the affected lakes. (i.e. I am told that Walker Lake (Muskoka) is being stocked with rainbow trout ... is this true and if so for how long?)
410. I think this publication is useful and I hope that you will not only continue it and make us aware of the poisoned fish but also take strong action to fight against it.

412. I am concerned about acid rain and more government awareness also from USA. You could include a questionnaire on public awareness.
414. Excellent, enjoyed it and using it constantly.
424. I personally think these guides are very useful in case any of our fish has any bugs or any bites that may concern us.
425. Keep up the good work. We could use a book of this calibre in Michigan.
426. Keep up the good work.
436. Should advertise the Guide on T.V. prior to Canadian Sport Fishing shows.
438. Quite informative.
440. Size limit on Bass should be reduced to 10" - larger bass should be released to spawn.
449. Keep up the good work!
450. My opinion say's you've done a good job. Thank you for your info.
451. I enjoy fishing very much and appreciate your Guide. Thank you.
458. It is good for anyone.
463. It was nice to find good places we could start fishing at again. We really didn't know where to go and where it was safe to fish. Didn't know this book was available as go it in Cambridge and we live in St. Catharines.
468. Strict fines for polluting the waters.
469. Very good.
470. Very informative.
473. Good work - Keep it up - just add more lakes
476. I find it very sad that there are restrictions and that I and my family like to practice catch and release so future generations can at least catch them even if they can't enjoy eating them.
479. It's fine. I would like to recieve news letters or whats going on with the ministry and local programes in stocking.
481. Good.
483. Keep this project going.
490. It is a good guide.
492. Keep trying to fight the government against acid rain/pollution and also the cut-back on the lamprey funds.
493. Do commercial fishermen follow this Guide?
494. I've thrown away earlier Guides and am sorry for it as I've found in subsequent years when a lake is not listed, that I wish I hadn't so I could consult earlier years.
495. Should be distributed to Secondary School Science Departments.
496. Does contaminate levels vary at different times of year?
498. Now that I have my own Guide I will be able to eat some of my catch. Thank you for putting my mind at ease - Keep up the good work.
500. I am only 16 but I love fishing and I am glad of this book because I care very much about what I'm eating also it gave me a better idea of what kind of fish are in what lakes.
503. I was impressed for the public awareness pertaining to certain fish and their locations.
507. It's fine. Keep it up.
508. It's just fine.
509. Excellent every year and getting better.
511. The supply books in beer and liquor stores is a waste of money - People interested should be able to pick them up at government offices and licence issuers. Many of

these books are wasted by persons who pick them up because they are free.

522. Stalk more local trout streams. Why are pickerel so scarce in the Nottawasaga River
524. I feel that only persons that purchase a licence should recieve a copy. In LCBO Outlets these books are "picked-up"and used as campfire starter. We cannot afford a 70 cent/litre gasoline.
534. Excellent program, keep up the good work.
536. Keep up the good work.
537. Big Clear has been stocked for the last 5 years with walleye - it has a great number of fishermen who would be interested in the contaminant level in the fish.
546. Excellent. Keep up the good work.
550. How does mercury, other then by air, end up in lakes, many miles from any industry? Is natural occuring mercury as harmful as man-made pollutants? Are brook trout lakes tested?
553. Restrict boating! Clean the water. Monitor waste from cottages.
554. Nice to see the use of recyclable paper.
556. Data presentation is excellent. Alphabetical listing og lakes simplifies reference.
562. I think it's a crime that there have been so many fish wardens hired just to check on licences. That money should be put towards more production of fish. Further, I think people who have retired by the age of 60 should also not have to buy a fish licence on fixed income.
564. Greatly appreciated.
566. Start a anti pollution campaign with boaters, fishermen, and all water users about paper, bottles and refuse of all kinds.
567. Get after the politicians about acid rain.
570. Very informative and educational. Everybody has the right to be informed of the contaminants in our fish that we eat. Thumbs up to this program.
572. I would like to see records monitoring fish sold commercially.
573. Parry Sound Bay should be stocked with fish.
576. It's a great guide for fishermen.
579. Why not make this available at the time a fishing lisence is purchased.
583. Less pollution. Eliminate lamphry. More stocking programs.
586. Hope this Guide continues being published. The information contained is very useful.
587. Keep up the good work. Thanks.
589. Good work guys!
590. Guide is fine. Please keep up the fight against pollution!!!
594. It's a great program. I use it alot.
600. Program is much needed, as I enjoy eating fish as well as the relaxed feeling knowing what I am eating. Conserving our fish is a must.
601. It is a waste of taxpayers money - don't publish it! Let people contact Ministry for information if they want it.
604. Morrison Lake (near Gravenhurst): What contaminants are there in these fish? There is no industry and nearly no farming in the area. We are told that the water turns over in the lake nearly once a year. Explain why the fish are contaminated.
605. A OK!
607. Keep up the good work. You have come along way but there is still room for improvement.
610. It gets better each year.

611. Best Guide yet.
612. I am shocked at the damage we are doing to our lakes and rivers.
618. Useful to settle disagreements and prove fish can be eaten from Lake Ontario in view of such adverse publicity.
627. An excellent program and publication.
633. Very informative.
634. Well informative.
638. It's a great Guide.
644. Keep up the good work!
646. I am unsure of the implications for fish purchased in local stores.
648. Good, free, and lots of information.
649. Very interesting and informative.
652. This Guide is very good. Keep up the good work!
653. Survey to see who would like to eliminate grey water systems on all boats. Thanks.
659. Many places I have fished in have produced species not listed in this Guide. It is hard to know how rare they are or how my keeping of them will affect their population. I think that going a little bit further into the study and listing of more species would be appropriate and helpful to all anglers.
660. Where does the fishermen stand when eating fish from less important lakes and rivers in Northern Ontario. Also, I am curious in finding out where the contaminants are coming from, especially in lakes from Northern Ontario where industrial pollution is not as common.
661. This is a vital program, it is needed. It has far reaching implications, not only re: "where are these toxins coming from?". But for me and my family as to the location of our recent purchase of recreation/retirement and possible re-location property.
667. Establish law by which of the contaminating companies have to clean their waste waters. If not they would have to pay very high fines or close the company.
669. I feel that this is an excellent and very informative guide book. Keep up the good work!
672. Very good Guide.
673. Oui! J'ai ce Guide depuis 2 jours seulement! Il est excellent! Si vous plait continuez et merci a l'avance. Mes amis et moi le consultons a chaque poisson.
676. Thanks for puting the French in a different section of the book (much easier to read!!!).
678. Keep up the good work. Thank you.
683. I have always found the Guide to be invaluable. It is a great educational tool for environment awareness and health.
684. Increase stocking programs.
689. It's a shame we have to test the fish to find out what pollutants exsist in our waters.
690. Americans should be checked more often. Americans should pay more money for fishing licenses. Stop Acid Rain.
696. Leave Guide the way it is, is good.
698. Overall a very comprehensive Guide.
702. It is nice to see that your testing water and putting out questionnaires, but you need action to clean up the contaminates.
710. Very surprised to learn fish isn't be tested more often.
711. Would like to know when Mazinaw Lake was last checked and when it will be

checked again.

713. A very useful publication and keep up the good work!
714. Guide is satisfactory.
718. Keep it up. It's great.
720. This guide is GREAT!
722. Don't discontinue the Guide, Please!!!
725. Well done.
728. 1) Long awaited information. (2) Provincial Premiers, and Legislators should have this guide.
730. I think the Guide is an excellent idea.
735. Excellent.
737. Would like this publication every six months. Because it would enable people to keep abreast of contamination of fish in our area.
740. Just fine.
742. It is an excellent publication.
745. Cleaner river and lakes so we can eat our fish.
747. I feel it is a very good idea and a necessary one.
749. A lot of talk, no action. $200.00 fines don't clean our water. Make fines at least enough to pay salories.
750. To me it is already perfect.
752. Excellent program.
753. The Guide is a very good book for the local fishermen or out of town fishermen.
756. The Guide is perfect. I get my friends to use it when they fish. I have not fished in this provance since licencing came into effect. I like to fish but can live without it. I'm not paying for something I've done for free all my life. Licencing is a gimmic I'll not take part in.
757. More info is needed. What are the main clean up attempts at pollution? Does Ontario Hydro pollute the rivers and lakes with their Hydro Dams?
758. I found this book to be informative and extremely helpful. I will continue to get this book annually.
762. The "fish identification" section has been especially helpful, now that I've been frequenting other small lakes and rivers, deeper into the forest.
763. Excellent publication.
764. In the long term the guide could mean ensuring the quality of life for many canadians who eat fish. Cutting back on any budgets would be offensive to me. The government has a moral obligation to improve this public service.
767. The readings and statistics should be read from the worst concentrated area for contaminants and when the water is at its warmest.
770. Tighten regulations on pollution, and again keep the french out.
775. Keep up the good work guys and gals.
776. I read a good article about this guide in the Sun (Toronto) by John Kerr. From this article and my own opinion working at an L.C.B.O. store, I feel money is being wasted by giving them out so freely. If the book was given out to people buying a fishing liscence, costs could be reduced because of less wasteage. Then you could also have a few on hand at sports stores or shopping centres were fish is bought.
778. Put a charge on this publication to ensure it is not missed - ie.- taking one for the sake of having.

782. Everyone I know checks the guide after having already eaten the fish. No-one keeps the guide handy for quick reference. Maybe you could display information in the L.C.B.O's etc for that particular area. Maybe post the information at the access to lakes and river. The information is good but no-one reads it.
783. It's well done.
784. It is a fine program, please do not scrap it. If possible a few more of the beaten path lakes and rivers included in your survey. Thankyou for a fine book and program.
787. Excellent guide for a fisherman. Thank You.
788. Doing a good job. Thanks.
794. Should your ministry be involved more in the non pollutants. Indian River was closed for swimming all summer - why - what affect has this on fish.
798. Great program, wish I would have seen the other issues. Maybe I wouldn't have eaten as much fish.
799. This program is great. If this is part of our $10.00 yearly fee then it is money well spent. Thank you for your hardwork to keep the fishing great.
803. Excellent guide. Thanks Ontario for caring.
807. Find the section on Lake Ont. Salmon somewhat strange in that they supposedly travel all around the lake but the guide lists them according to the location they are caught.
808. Tell us where all the monies received from our 10.00 liscenses go to!!
813. i think it's an excellent guide.
815. Very informative.
823. It is encouraging to know that such control & interest is being addressed by a provincial body. This should be universal in every respect. Congratulations.
824. My family and I enjoy Ontario for its boating, fishing, camping, etc. I hope that Ontario maintains its commitment to keeping its lakes and rivers clean.
825. Good idea!
826. I like it.
827. Made me aware of what I was eating & contamination levels. Keep up the good work!
828. Make sure all, I repeat all monies taken in for fishing licenses goes to improving fish habitat & lake stocking as it was originally intended!!
829. I think the program & publication are very good.
832. Do something about the Sea Lamprey.
832. Eliminate it. Fish advisories can be printed for each district and be available on a regional basis. Put the money into improving water quality.
836. Excellent guide pour le pecheur. Continuez votre bon travail, guide tres comply.
839. Good publication.
841. This publication is fabulous and vital. The Ministry of the Environment and Ministry of Natural Resources are the only Government offices that I am pleased with. At least your efforts can be seen. Keep up the good work.
845. On pickerel there should be a size limit, as pickerel are being kept too small.
850. Your doing a good job, keep it up.
851. Good.
853. For the type of fishing I do the book is very good.
859. I am very pleased to see more awareness of our environment of the do's and don'ts, keep up the good work folks, you're not alone.
866. Usefull information.

870. Helpfull guide.
872. I've never obtained this book, but now I'm glad I did.
877. Keep up the good work all future fishing plans are maid using this guide.
882. It's a great book I engoy it. It's great.
883. Was very helpful and interesting.
884. This guide has opened my eyes on fish consumption as I will be fishing Lake Ontario in 1990. This is the greatest book on fishing I have ever seen. This book should have a price on it. That's how good it is. Thankyou very much for this book as its answered all my questions on sport fishing.
886. Retest Lake Erie, Ontario, Superior, Huron. I don't beleave the fish should be rated so high, so clean on the lakes above.
888. Keep it up!
889. Excellent.
894. Happy to see some (lot's really) of work on our behalf.
895. Very good. Considering I have fished most of my life, I never new the feds issued the book. I don't drink much. Never go by booze. Had to be told it was at liquare store. There's got to be a better way of distribution.
896. Great book & keep it up.
898. Better education. Stop pollution.
900. Very helpful & easy to understand.
902. I believe the water flow is bothering the natural habitat of fishing, particularly fly fishing rivers & streams.
904. Guide is already well written and easy to use.
913. After living a lifetime in Quebec, this program, it, and the other conservation efforts are eye-openers - Keep the faith. You are doing a fine job. The staff I have met at several locations are a credit to the department and to the province. I hope that a 'speaker' program will be expanded - to talk about the positive aspects as well as the problems.